

## REMARKS

Claims 1-36 remain in the case. Applicants acknowledge that prosecution on the merits has been reopened in response to the filing of their Appeal Brief, and choose to respond to the Office Action. The Office objected to the specification, drawings, and claims on a number of grounds and rejected each of claims 1-36. More particularly, the Office:

- objected to the drawings for failing to include the reference “520”;
- objected to the specification for failure to conform reference numerals to the drawings;
- objected to claims 10, 26, 32, and 35 for antecedent basis irregularities;
- rejected claim 34 as indefinite under 35 U.S.C. § 112, ¶ 2, for lack of antecedent basis for the limitation “the data store”;
- rejected claims 1-7, 23, and 25-29 as anticipated under 35 U.S.C. § 102 (b) U.S. Letters Patent 4,861,419 (“Flinchbaugh, *et al.*”); and
- rejected claims 8-22, 24, and 30-36 as obvious at they time they were made under 35 U.S.C. § 103 (a)) over Flinchbaugh, *et al.* in combination with U.S. Letters Patent 5,576,629 (“Turner, *et al.*”).

Applicant has cured each of the objections and traverses each of the rejections.

### **I. RESPONSE TO INFORMALITIES**

The Office Action objected to the specification, drawings, and claims on a number of grounds:

- objected to the drawings for failing to include the reference “520”;
- objected to the specification for failure to conform reference numerals to the drawings; and

objected to claims 10, 26, 32, and 35 for antecedent basis irregularities.

Applicant has cured each of these objections by amendment above.

Applicants respectfully submit that the objections to the drawings have been cured by amendment to the specification. In particular, the Office Action objected to the drawings because they failed to include the reference “520”. Applicants believe they have sufficiently amended the specification to replace “520” with “515” and thereby remove all reference to “530.” Accordingly, Applicants believe corrections to the drawings are no longer needed and that the objection has been cured.

## **II. RESPONSE TO SUBSTANTIVE REJECTIONS**

The Office made three substantive rejections in the Office Action, by rejecting:

- claim 34 as indefinite under 35 U.S.C. § 112, ¶ 2, for lack of antecedent basis for the limitation “the data store”;
- claims 1-7, 23, and 25-29 as anticipated under 35 U.S.C. § 102 (b) U.S. Letters Patent 4,861,419 (“Flinchbaugh, *et al.*”); and
- claims 8-22, 24, and 30-36 as obvious at the time they were made under 35 U.S.C. § 103 (a) over Flinchbaugh, *et al.* in combination with U.S. Letters Patent 5,576,629 (“Turner, *et al.*”).

Applicant has cured each of the objections and traverses each of the rejections.

### **A. CLAIM 34 IS NOW DEFINITE**

The rejection of claim 34 for lack of antecedent basis for the limitation “data store” has been cured by amendment above.

**B. FLINCHBAUGH, *ET AL.* FAILS TO ANTICIPATE  
CLAIMS 1-7, 23, & 25-29**

The Office rejected claims 1-7, 23, and 25-29 as anticipated under 35 U.S.C. § 102 (b) U.S. Letters Patent 4,861,419 ("Flinchbaugh, *et al.*"). An anticipating reference, by definition, must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990). Office policy echoes this formulation M.P.E.P. § 2131. Each of the independent claims recites a "request" between a fault detection controller and a report generator, which Flinchbaugh, *et al.* fails to disclosed. Accordingly, Flinchbaugh, *et al.* fails to anticipate any of claims 1-7, 23, and 25-29.

Each of the independent claims 1, 7, 15, 23, and 30 recites a "request" between a fault detection controller and a report generator or the act of "requesting" or "generating a request." (cl. 1, lines 5-6; cl. 7, lines 6-7; cl. 15, lines 6-7; cl. 23, lines 5-6; cl. 30, lines 6-7). The Office cites col. 9, lines 3-22 and col. 17, lines 49-68 of Flinchbaugh, *et al.* as disclosing this limitation. These citations are excerpted below, and fail to teach or suggest any such "request" or "requesting":

Also shown in FIG. 1 is a digital processor or computer 40 operably connected to photodiode 36 to receive the output signal or photodiode 36. Computer 40 functions in the embodiment of the present invention, among other things, to store programs and subroutines for the system, to store the reference end point trace or traces and other data, and to analyze the actual end point trace, to compare the reference end point trace with the actual end point trace and match the actual trace to one or more reference traces using dynamic time warping (to be later described), to store information regarding comparisons of the reference end point trace with the actual end point trace including cumulative warping costs, and provide certain signals or controls to the plasma etcher or the operator of the equipment as well as other functions as desired. An output 42 from computer 40 provides signals to either the plasma

etch reactor, control equipment for the plasma etch reactor, to an operator, to signal means or other means as desired.

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Additionally, the present invention can be used in a real time application to minor [sic] the etch process as it actually proceeds and, either alone or in conjunction with other systems such as expert systems, to vary or correct etch parameters during the etch when abnormalities are detected.

Additional advantages of the present invention include elimination of strip-chart recorders from the clean room, and the ability to edit large volumes of end point traces by saving only those that show an anomalous behavior.

Another advantage is that the system functions as a process monitoring tool that complements the microprocessor-based hardware monitoring function. While the hardware monitor sets alarms and halts the processing based on hardware problems (for example, no RF power, no gas flow, incorrect pressure or other similar problems), the embodiment of the present invention can warn the operator, and eventually shut off the etcher, based on reaction process related problems.

Flinchbaugh, *et al.* actually fails to disclose two separate functionalities (*e.g.*, fault detection controller and report generator) between which such a "request" could be transferred. Thus, Flinchbaugh, *et al.* cannot be construed to teach such a "request." Accordingly, Flinchbaugh, *et al.* does not anticipate any of claims 1-7, 23, and 25-29.

**C. FLINCHBAUGH, *ET AL.*, IN COMBINATION WITH TURNER, *ET AL.*, FAILS TO RENDER OBVIOUS CLAIMS 8-22, 24, & 30-36**

The Office rejected claims 8-22, 24, and 30-36 as obvious at the time they were made under 35 U.S.C. § 103 (a) over Flinchbaugh, *et al.* in combination with U.S. Letters Patent 5,576,629 ("Turner, *et al.*"). As noted above, the independent claims 1, 7, 15, 23, and 30 recite a "request" between a fault detection controller and a report generator or the act of "requesting" or "generating a request." (cl. 1, lines 5-6; cl. 7, lines 6-7; cl. 15, lines 6-7; cl. 23, lines 5-6; cl. 30, lines 6-7). The rejections under 35 U.S.C. § 103 (a), rely on Flinchbaugh, *et al.*, for teaching

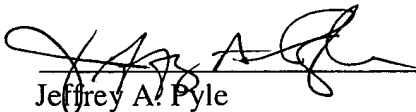
this limitation and make no allegation that Turner, *et al.* teach it. Consequently, the obviousness rejections also fail because the combination of Flinchbaugh, *et al.* and Turner, *et al.* fail to teach such a "request."

### III. CONCLUSION TO REMARKS

Applicants therefore respectfully submit that the application is in condition for allowance. Applicants have cured all objections by amendment, and traverse all the rejections. In particular, the cited art fails to disclose all the limitations of the claims. Applicants therefore request that the application be allowed to issue.

The Examiner is invited to contact the undersigned attorney at (713) 934-4053 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

  
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Date: January 29, 2004